

Date: Mon, 24 Oct 94 16:30:32 PDT
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>
Errors-To: Info-Hams-Errors@UCSD.Edu
Reply-To: Info-Hams@UCSD.Edu
Precedence: List
Subject: Info-Hams Digest V94 #1153
To: Info-Hams

Info-Hams Digest Mon, 24 Oct 94 Volume 94 : Issue 1153

Today's Topics:

10m opening....
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HOW TO LEARN CW??? (2 msgs)
 IARU
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 PGP-Signatur in PACKET RADIO (2 msgs)
Please read me before subscribing to mailing lists
 SELCAL
 Touch Tone Paging (DTSS)
 TUTORIAL: dB & dBm
 Utah Hamfest/swapmeet

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Mon, 24 Oct 1994 15:08:25 GMT
From: dbushong@wang.com (Dave Bushong)
Subject: 10m opening....

dave@flowserver.stem.com (David Adams) writes:

>Ah what a fine week...here in CA there's been a 10m opening
>everyday this week from around noon - 3 (local). It was nice
>to hear a voice on the radio again (still haven't passed the 13wpm for

>the u[pgade)...even pulled in a few new states...

Did anyone hear the opening to all US last night (Sunday, 10/23) until a couple of hours *after* sundown? I heard a lot of 10m SSB and CW out here near Boston.

Just a reminder - this is stuff that you can work with your Novice, or with a Tech+HF license. Small antenna (16' dipole) and a \$100 used radio and you're on!

73,
Dave, KZ10

--
Dave Bushong
OPEN/image Recognition Products

Date: 24 Oct 94 18:28:25 GMT
From: taylor@tix.timeplex.COM (Seth Taylor)
Subject: callsign server site

Can anyone advise where I might telnet to get a US based
callsign server ?

TNX es 73 Seth KC2WE

Date: 24 Oct 1994 16:21:11 GMT
From: djenkins@jetson.uh.edu (David Jenkins)
Subject: Digital Signal Processors

An ad in QST for an MFJ DSP (I forget the model) has piqued my interest. Can anyone point me to a relevant review article that discusses these devices from a high enough altitude such that a fledgling Tech+ might understand what's being discussed?

David F. Jenkins
Decision and Information Sciences
University of Houston
KC5JRR

Date: 24 Oct 1994 16:03:31 GMT

From: rkarlqu@scd.hp.com (Richard Karlquist)
Subject: FT757 are they any good?

In article <387rmc\$1st@lazar.apana.org.au>,
Simon Brown <simonb@zikzak.apana.org.au> wrote:
>I am interested in buying an FT757 HF rig. I would be interested if
>anyone has had any problems with this rig. As far as I know it is OK.
>
>Thanks in advance
>
>Simon
>
>ps. You can email me simonb@zikzak.apana.org.au as not to fill up the
>newsgroup!!
>
>
>--
> Zikzak public access UNIX, Melbourne, Australia.

It's an inexpensive rig where you get what you pay for. And what you get is a mediocre design with lots of annoying little problems. The +12V connector radiates copious amounts of RF. The break in CW doesn't work very well. You can't use an external keyer unless you build a "weight increaser" circuit to go between it and the rig. There is insufficient IF gain, especially on CW. This forces you to use the RF amplifier a lot. The cooling fan "keys" in unison with your CW dots and dashes because it's sense circuit is voltage sensitive and your +12V is going to vary with key up/key down. The squelch for 10 M FM is lousy. The remote tuning on the microphone is poorly designed. You can't turn the power down to run less than 100 watts reliably; its about 5 degrees from 0 to 100 watts. The filters are nothing to write home about. You can't run AMTOR because the transmit receive switching is too slow. Etc, Etc. Etc.

If you just want a simple ragchewing rig that is small and cheap, then you are probably OK, though.

Rick N6RK
rkarlqu@scd.hp.com

Date: 24 OCT 94 11:41:20
From: randolph@est.enet.dec.com (Tom Randolph)
Subject: HOW TO LEARN CW???

In article <2d.26369.2003.0N851631@exchange.com>, bob.stanton@exchange.com (Bob Stanton) writes...
>From: bob.stanton@exchange.com

>Subj: How to Learn CW???

> I give up! I have been trying to learn the code since before I was
>licensed with no luck. I have tried tapes... all I do is memorize the
>tape... not the code. I sit in front on my computer pounding my head on
>the keyboard (figuratively). I HATE CW!!!
>Bob KD4ARD

Well, you apparently have a PC and a portable cassette recorder... What I did was to record my own tapes from the computer. Set up one of the code programs to beep out random words or random letters. These are very difficult to memorize. After half an hour, turn the tape over and record the other side 1 wpm faster. When you can copy 75% on the 1st side, start on the second side. When you copy 75% on that side, re-record the whole tape even faster.

This plus W1AW got me from 7-8 WPM to 15 WPM in about 2 months. I don't think I'm gonna try to use the same method to get to 20 WPM - I want to get on the air.

BTW, I've never seen anyone else mention the above method. It's great if you're not always near a PC.

-Tom R. N100Q randolph@est.enet.dec.com

Date: 24 Oct 1994 17:12:41 GMT
From: wjturner@iastate.edu (William J Turner)
Subject: HOW TO LEARN CW???

In article <38gl0d\$rd8@mrnews.mro.dec.com> randolph@est.enet.dec.com (Tom Randolph) writes:

>Well, you apparently have a PC and a portable cassette recorder... What I did
>was to record my own tapes from the computer. Set up one of the code programs
>to beep out random words or random letters. These are very difficult to
>memorize. After half an hour, turn the tape over and record the other side 1
>wpm faster. When you can copy 75% on the 1st side, start on the second side.
>When you copy 75% on that side, re-record the whole tape even faster.

I've never heard of **quite** this method before, but I do know other people that have made their own tapes from a computer program (like this). It definitely helps you keep from memorizing the tapes if you can make a new one whenever you feel too comfortable with the tape you're using.

Date: Sun, 23 Oct 1994 12:32:32 GMT
From: ee_hflo@dmc428.ust.hk (Michael Lo)
Subject: IARU

Dear All Hams in the USENET,

Are there any email/packet address can go to IARU ?

--

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-----
| Lo Ho Fung Michael          | E-mail address : ee_hflo@stu.ust.hk      |
| Department of Electrical    | Packet address : VR2YJR@VS6XMT.HKG.AS    |
| & Electronic Engineering    | Stand by at repeater stations           |
| The Hong Kong University    | VS6KP (Tate's Cairn 577m) 145.650 Mhz (-) |
| of Science & Technology      | VS6HKA (Mount Gough 400m) 145.750 Mhz (-) |
| Major : Computer Engineering | VS6MA (Victoria Peak 552m) 145.575 MHz (-) |
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Date: 24 Oct 94 13:04:01 GMT

From: William=E.=Newkirk%Pubs%GenAv.Mlb@ns14.cca.rockwell.COM

Subject: Keyer polarity for 520?

>From: dave@flowserver.stem.com (David Adams)

>Subject: Keyer polarity for 520?

>Greetings! I've scammed the manual (thanks guys) and haven't
>found it yet. Does the Kenwood TS-520 (no S or ES) operate on
>grid (negative) or direct (positive) keying...my guess would be
>direct, but it does have tube finals so...if you know,
>please pass the info on...

>73 de dave, n9uxu

you short the key line to ground to key the transmitter....although it's been quite a while since i've had a TS-520, i recall it was grid-block keying as far as how the keying worked internally.

in general, you close a switch to activate a transmitter (that way if the key isn't connected, the transmitter doesn't come on). i believe even the few radios that have a "positive" key line input have a conventional ground-to-key input as well.

if you're building a keyer or some control device, you might want to consider putting in an optoisolator to actually be the device that "keys" the transmitter. lets you avoid having to figure out what to do about any voltages that could be found on a keyline.

bill wb9ivr

Date: Mon, 24 Oct 1994 14:58:40 GMT
From: dbushong@wang.com (Dave Bushong)
Subject: NoCal 00 goes after Packet BULLETins

wes@quasar.eng.wayne.edu (Wes Harrell), using questionable judgment
relinquished control operator authority of his TTY and let
ron@chaos.eng.wayne.edu (Ron, N8FOW) write:

>(don't do an autoreply to me, this is my friends account due to
>system maintenance on my normal machine. I just kill flame messages
>anyways to me, so don't waste your time with those, they won't get read)

An interesting footnote from someone during a discussion of having an
open mind.....

Dave, KZ10
--
Dave Bushong
OPEN/image Recognition Products

Date: Mon, 24 Oct 1994 14:51:52 GMT
From: dbushong@wang.com (Dave Bushong)
Subject: NoCal 00 goes after Packet BULLETins

rapp@lmr.mv.com (Larry Rappaport) writes:

>Bear in mind that what is being discussed are one-way bulletins. In
>legitimate discussion, the FCC has very little power to regulate anything. I
>think if their power were ever challenged in that regard, that under the
>first amendment, it might become very difficult to censor anything... :)

>That said, IANAL, so maybe I'm full of crap. :)

>Larry W1HJF

Larry is right. We are talking about the guy who posts his mother's
cookie recipe to ALL@USBBS, not outlawing the 40-meter Cookie Net.

As many have said, this newsgroup is more relaxed as far as what we
can and can't post. What would happen, though, if that guy posted a
cookie recipe on rec.radio.amateur.misc? He'd get flamed off the net.
He would be told that this is not the place to post cookie recipes.

Ditto for the Packet BBS system.

Dave, KZ10

Disclaimer: I like cookies.

--

Dave Bushong
OPEN/image Recognition Products

Date: 24 Oct 1994 15:41:07 GMT
From: bassett@merlot.syntex.com (Greg Bassett)
Subject: NoCal 00 goes after Packet BULLETins

--

As I recall, NTS message traffic over the PBBS system is not directed to any specific callsign and generally does not include items of interest to amateur operators.

In fact, I seem to recall that most emergency health and welfare traffic over the PBBS system didn't either.

Hmmm, I guess its time I broke out pen and paper.

Regards,
Greg

Greg Bassett
Syntex Corporation
(415) 855-5825

bassett@merlot.syntex.com
KJ6EP@N6QMY.#NOCAL.CA.USA.NA

Date: Mon, 24 Oct 94 00:16:22 EST
From: bafpa@infodude.com
Subject: PGP-Signatur in PACKET RADIO

IT>I just think about the possibilty of the PGP-Encryption-program
IT>in amateur radio:

IT>A ham is only allowed to use "open speech". But signing a message
IT>with the program PGP might be ok.

IT>It could reduce the possibility of pirates in amateur radio using
IT>others call sign to work in Packet Radio.

IT>Any comments are welcome

I thought your call sign had to be aired in plain english, just like your transmission? If I'm not making any sense, lemme know..
BTW: I'm a studying ham, and hope to take the No code tech VERY soon..
-Evan Platt
Southern Region Director
Bay Area Fire Photographers Association
Internet:bafpa@infodude.com

--
---- Sent by:
InfoDude Communications
Via Major Gateway/Internet

Date: 24 Oct 1994 14:46:50 GMT
From: pcr@ic.net (phil reed)
Subject: PGP-Signatur in PACKET RADIO

In article <7512523109@infodude.com>, bafpa@infodude.com says:
>
>
> {text on PGP signing deleted}
>
>I thought your call sign had to be aired in plain english, just like
>your transmission? If I'm not making any sense, lemme know..
>BTW: I'm a studying ham, and hope to take the No code tech VERY soon..
>-Evan Platt
>Southern Region Director
>Bay Area Fire Photographers Association
>Internet:bafpa@infodude.com
>

It does, ordinarily. However, the AX.25 protocol used by packet radio includes your call sign in each packet. Therefore, every transmission is properly IDed (provided you have set your TNC up correctly).

...phil / kb8uoy

Date: Mon, 24 Oct 1994 14:50:24 GMT
From: n1list@netcom.com (Michael L. Ardai)
Subject: Please read me before subscribing to mailing lists

When subscribing or unsubscribing to a mailing list, *DO NOT* send a message

to the entire list saying 'subscribe me'. Most mailing lists are automated and the controlling program doesn't look in the outgoing stream for instructions. Those posts, however, do annoy the hundreds of people on the list. When you subscribed, you should have gotten a note explaining how to get off the list.

If you are losing an account, please unsubscribe from any mailing lists that you are on (if you can). Don't just assume that the maintainer will handle it. Some of us get well over 100 bounces a day, and that makes our volunteer work more of a chore.

Thanks./mike

Maintainer, BARC lists

--

\\|/ Michael L. Ardai N1IST Teradyne ATB, Boston MA

-*- -----

/|\ ardai@maven.dnet.teradyne.com n1list@netcom.com

Date: Mon, 24 Oct 1994 08:23:25 GMT

From: jeffrey@kahuna.tmc.edu (Jeffrey Herman)

Subject: SELCAL

In article <2EAB4E8F@smtp> pve@dg13.cec.BE (VEKINIS Peter) writes:

>All,

>In aviation, all transtlantic travel require aircraft to have selcal ID
>transpacific, too!

>units on board. SELCAL is a 4 letter code which is used to beep an aircraft
>on HF so that the pilot does not have to listen to all the frequency
>chatter. In other words it's a tone squelch.

>

>The system works on tone separation of 2 tones. In other words a dual tone
>signal is emitted where say, one tone is emitted at 850Hz and the other at
>1041Hz, their separation identifying what signals these are.

>

>SELCAL signals are tones from A to R and they are transmitted in two pairs,
>ie the pilot would say "SELCAL check, AQDB" and the ground control would
>send these two dual tone signals. Since this is SSB, the decoder looks for
>separation of tones rather than the tones themselves.

Slight correction here: When the tones are send by the land-based transmitter a carrier is injected - it's as if the tones are amplitude modulated. If you listen carefully with your receiver a bit off frequency you'll detect the presence of a carrier just prior to the start of the tones. Thus for an brief period, the comms shift to AM - the aircraft's receiver then has no trouble decoding the

2+2 tone format (two tones sent similtaneously followed by two other tones sent similtaneously; similar to what large county fire departments use), so that the receiver is actually decoding four seperate tones, not the difference of pairs of tones.

Jeff NH6IL

Date: Mon, 24 Oct 94 00:16:22 EST
From: bafpa@infodude.com
Subject: Touch Tone Paging (DTSS)

IF>'s wonderin' whether touch tone paging should/shouldn't work via a repeater.
IF>When I try it simplex, I page the other HT and it opens up its squelch,
IF>no problem whatsoever. Same thing doesn't work when going through a
IF>repeater. Would it not work cause the repeater shifts the touch tone
IF>frequencies and they are therefore not recognized by the receiver
IF>expecting the codes. I did indeed wait till the repeater kicked in to
IF>release the three codes, even done it manually ... without success.

I'm certain you know about the input and output of a repeater... So:
Most repeaters have autopatches, and look for DTMF codes to access the
autopatch. So when you key the repeater INPUT and give it DTMF codes, it
doesn't send the DTMF codes to the OUTPUT (otherwise, anyone listening
with a decoder could find the codes..) Hope that explains it..

-Evan Platt
Southern Region Director
Bay Area Fire Photographers Association
Internet:bafpa@infodude.com

--
---- Sent by:
InfoDude Communications
Via Major Gateway/Internet

Date: Mon, 24 Oct 1994 12:59:09 GMT
From: phb@syseng1.melpar.esys.com (Paul H. Bock)
Subject: TUTORIAL: dB & dBm

tgold@microvst.demon.co.uk ("Anthony R. Gold") writes:

>In article <1994Oct21.175927.13608@news.rlc.nrl.af.mil>
> defranco@fermi.cs.rlc.af.mil writes:

>> Great introduction - well done, except for one minor nit.
>> A decibel is always relative. As you clearly demonstrate,
>> the decibel is the log of a ratio of two quantities. As such,
>> the resulting number is always relative. By fixing one of
>> the quantities, say as one milliwatt, you simply define one
>> of the two. That doesn't make dBm an absolute quantity.
>> Otherwise, great.

>As to concluding that dBm (either A dBm or some quantity expressed
>in dBms) is not absolute, this simply is an expression of an opinion
>that the term ABSOLUTE QUANTITY has no meaning whatever.

>This may be interesting philosophy, but it is not useful engineering.

Let me make one clarification regarding the dBm; that is, the original definition is "1 milliwatt dissipated in 600 ohms," which to my way of thinking is an absolute quantity. I say this because, by referencing a power level dissipated in a certain load resistance, one is defining an absolute value of power under well-specified conditions. We know the power and the load resistance, and we know from that the applied EMF and resultant current, and can relate the power itself back to some absolute amount of energy used to perform work. In that sense, I think, the dBm is then an absolute measure.

What I failed to do in the article was (a) discuss the original definition of dBm as noted above, and (b) equate that to modern usage which simply *assumes* that dBm, when used to discuss signal levels, are all dissipated in a common value of resistance (not necessarily 600 ohms). For example, when an RF engineer discusses dBm his assumption is that his circuits are all 50 ohms; if the impedances vary, then we have a problem because the amount of EMF necessary to dissipate 1 mw in 50 ohms is different from the EMF required to dissipate that same amount of power in 600 ohms. As an example, expressing receiver sensitivity as "-124 dBm" for one receiver, and "-127 dBm" for another is meaningless if the input impedances are not the same (well, not "meaningless," because one can always translate from one set of parameter values to another, but certainly confusing).

The point I really wanted to get across in the article was that dBm can be measured and related to a known power level, while dB is truly totally relative. I fear that many newcomers to ham radio become confused on this point, just as many non-RF engineers do here at work (One sometimes hears things like "the antenna gain is 12 dBm" or "we measured the system sensitivity and it was -127 dB" or "that amplifier has 0 dB output which is pretty high and might overload the receiver front end," etc.).

And, of course, these terms are not "rocket science" and can be easily explained and understood by anyone, but because they're "basic" no one bothers.

And thanks for the nice compliments; if the article helps someone gain better understanding, then it was worth the trouble to write.

	* Paul H. Bock, Jr.	* Principal Systems Engineer
(_)	* E-Systems/Melpar Div.	* Telephone: (703) 560-5000 x2062
)	* 7700 Arlington Blvd.	* Internet: pbock@melpar.esys.com
	* Falls Church, VA 22046	* Mailstop: N203

"What? Us, Interfere? Of course we're going to interfere!
Do what you're best at, that's what I always say!" -- Dr. Who

Date: 24 Oct 1994 05:42:49 GMT
From: levin@utw.com (Chris Levin)
Subject: Utah Hamfest/swapmeet

The Rocky Mountain Radio Association is sponsoring the first annual Winterfest.

This event will take place November 26, 1994 (Saturday after Thanksgiving) at the Salt Lake County Fairgrounds in the Theater building from 10 a.m. to 6 p.m. Admission to the event is \$1.00.

If you need more information, or are interested in booth space please send me e-mail or call me at 801-485-5637.

-Chris Levin (KB7Y0U)

Date: Mon, 24 Oct 1994 16:05:19 GMT
From: phb@syseng1.melpar.esys.com (Paul H. Bock)

References<19940ct21.175927.13608@news.rlc.nrl.af.mil>
<782908374snz@microvst.demon.co.uk>,
<19940ct24.132522.19761@galileo.cc.rochester.edu>
Subject: Re: TUTORIAL: dB & dBm

>Well, dbm is as relative a measurement as:
> two apples
> hundred dollars

>as they are relative to a single apple and dollar respectively. IMHO, just
>because the scale is linear in some cases and log in others does not
>change the relationship.

>Rajiv
>aa9ch

Having researched the use of "absolute" a bit more, I retract the use of that term and will correct the article to refer to the dBm as a relative measurement whose reference is **predefined** to be some specific, measurable quantity (in this case a milliwatt), whereas the dB is a measurement whose reference can be anything the user chooses. I'll think on this a bit more and choose the words carefully, but in any case the following excerpt is what put me straight in my thinking (although the impetus for researching it was created by several excellent follow-up posts, for which I thank the respective authors).

Here is the excerpt, with emphasis arrows (><) added:

Quoted from "Handbook of Engineering Fundamentals," Eshbach, third edition, p.397:

"So-called Absolute Unit systems. During the middle of the nineteenth century it became customary to refer to measurements in terms of the centimeter-gram-second mechanical unit system as 'absolute' measurements, and the cgs system, as adopted and recommended by the British Association for the Advancement of Science in 1873, was called the 'absolute' unit system. This designation is >unwarranted<, as >no< system can claim 'absoluteness.' The reduction of the fractional electrical dimension systems to the three so-called absolute mechanical dimensions is inadvisable and the resulting absolute unit systems will, therefore, not be considered here. The complete unit systems resulting from the fractional dimension systems, which sometimes are called 'completely absolute' systems because of their complete set of fundamental dimensions, will be called here 'theoretical' unit systems.*"

"*G. Mie, 'Electrodynamik,' Handbuch der experimental Physik, Vol. 11, 1932."

(_)	* Paul H. Bock, Jr.	* Principal Systems Engineer
)	* E-Systems/Melpar Div.	* Telephone: (703) 560-5000 x2062
	* 7700 Arlington Blvd.	* Internet: pbock@melpar.esys.com
	* Falls Church, VA 22046	* Mailstop: N203

"Imagination is more important than knowledge." - Albert Einstein

Date: Mon, 24 Oct 1994 14:24:54 GMT
From: gary@ke4zv.atl.ga.us (Gary Coffman)

References<38di94\$pl2@detroit.freenet.org> <782973802-0-55207@ns1.CC.Lehigh.EDU>,
<1994Oct24.133226.2726@ul.tb.isc.rit.edu>
Reply-To: gary@ke4zv.atl.ga.us (Gary Coffman)
Subject: Re: Passed my Tech today! Now the wait...

In article <1994Oct24.133226.2726@ul.tb.isc.rit.edu> klg5646@ul.tb.isc.rit.edu (K.X. Gerling) writes:

>In article <782973802-0-55207@ns1.CC.Lehigh.EDU> slammy@chop.isca.uiowa.edu writes:

>>

>>I dunno - I took the exam the same day as you - and I've called the FCC
>>repeatedly - and they have no record of my application...I guess I'm one of
>>the 8 -10 week stories you've been hearing about..

>>

>

>Well, maybe you should stop calling them so that they can process your
>application. I've heard that the same people who answer the phone
>process the apps.

I've heard that too, and because even government employees are often human, I'll bet they put the applications of those who call the most at the bottom of the pile.

Gary

--

Gary Coffman KE4ZV		You make it,		gatech!wa4mei!ke4zv!gary
Destructive Testing Systems		we break it.		emory!kd4nc!ke4zv!gary
534 Shannon Way		Guaranteed!		gary@ke4zv.atl.ga.us
Lawrenceville, GA 30244				

End of Info-Hams Digest V94 #1153
